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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/780,224A

DATE: 06/07/2001

TIME: 13:54:10

Input Set : A:\208859.txt

Output Set: C:\CRF3\06072001\I780224A.raw

ENTERED

3 <110> APPLICANT: Roelvink, Petrus W  
 4 Kovesdi, Imre  
 5 Wickham, Thomas J  
 7 <120> TITLE OF INVENTION: ADENOVIRAL CAPSID CONTAINING CHIMERIC PROTEIN IX  
 9 <130> FILE REFERENCE: 208859  
 11 <140> CURRENT APPLICATION NUMBER: US 09/780,224A  
 12 <141> CURRENT FILING DATE: 2001-02-09  
 14 <150> PRIOR APPLICATION NUMBER: US 60/181,163  
 15 <151> PRIOR FILING DATE: 2000-02-09  
 17 <160> NUMBER OF SEQ ID NOS: 13  
 19 <170> SOFTWARE: PatentIn Ver. 2.1  
 21 <210> SEQ ID NO: 1  
 22 <211> LENGTH: 144  
 23 <212> TYPE: PRT  
 24 <213> ORGANISM: Adenovirus  
 26 <400> SEQUENCE: 1  
 27 Met Asn Gly Thr Thr Gln Asn Asn Ala Ala Leu Phe Asp Gly Gly Val  
 28 1 5 10 15  
 30 Phe Ser Pro Tyr Leu Thr Ser Arg Leu Pro Tyr Trp Ala Gly Val Arg  
 31 20 25 30  
 33 Gln Asn Val Val Gly Ser Thr Val Asp Gly Arg Pro Val Ala Pro Ala  
 34 35 40 45  
 36 Asn Ser Ser Thr Leu Thr Tyr Ala Thr Ile Gly Pro Ser Pro Leu Asp  
 37 50 55 60  
 39 Thr Ala Ala Ala Ala Ala Ser Ala Ala Ser Thr Ala Arg Ser  
 40 65 70 75 80  
 42 Met Ala Ala Asp Phe Ser Phe Tyr Asn His Leu Ala Ser Asn Ala Val  
 43 85 90 95  
 45 Thr Arg Thr Ala Val Arg Glu Asp Ile Leu Thr Val Met Leu Ala Lys  
 46 100 105 110  
 48 Leu Glu Thr Leu Thr Ala Gln Leu Glu Leu Ser Gln Lys Val Glu  
 49 115 120 125  
 51 Glu Leu Ala Asp Ala Thr Thr His Thr Pro Ala Gln Pro Val Thr Gln  
 52 130 135 140  
 54 <210> SEQ ID NO: 2  
 55 <211> LENGTH: 125  
 56 <212> TYPE: PRT  
 57 <213> ORGANISM: Adenovirus  
 59 <400> SEQUENCE: 2  
 60 Met Ala Glu Glu Gly Arg Ile Tyr Val Pro Tyr Val Thr Ala Arg Leu  
 61 1 5 10 15  
 63 Pro Lys Trp Ser Gly Ser Val Gln Asp Lys Thr Gly Ser Asn Met Leu  
 64 20 25 30  
 66 Gly Gly Val Val Leu Pro Pro Asn Ser Gln Ala His Arg Thr Glu Thr  
 67 35 40 45  
 69 Val Gly Thr Glu Ala Thr Arg Asp Asn Leu His Ala Glu Gly Ala Arg  
 70 50 55 60

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72 Arg Pro Glu Asp Gln Thr Pro Tyr Met Ile Leu Val Glu Asp Ser Leu  
73 65 70 75 80  
75 Gly Gly Leu Lys Arg Arg Met Asp Leu Leu Glu Glu Ser Asn Gln Gln  
76 85 90 95  
78 Leu Leu Ala Thr Leu Asn Arg Leu Arg Thr Gly Leu Ala Ala Tyr Val  
79 100 105 110  
81 Gln Ala Asn Leu Val Gly Gly Gln Val Asn Pro Phe Val  
82 115 120 125  
84 <210> SEQ ID NO: 3  
85 <211> LENGTH: 125  
86 <212> TYPE: PRT  
87 <213> ORGANISM: Adenovirus  
89 <400> SEQUENCE: 3  
90 Met Ala Glu Glu Gly Arg Ile Tyr Val Pro Tyr Val Thr Ala Arg Leu  
91 1 5 10 15  
93 Pro Lys Trp Ser Gly Ser Val Gln Asp Lys Thr Gly Ser Asn Met Leu  
94 20 25 30  
96 Gly Gly Val Val Leu Pro Pro Asn Ser Gln Ala His Arg Thr Glu Thr  
97 35 40 45  
99 Val Gly Thr Glu Ala Thr Arg Asp Asn Leu His Ala Glu Gly Ala Arg  
100 50 55 60  
102 Arg Pro Glu Asp Gln Thr Pro Tyr Met Ile Leu Val Glu Asp Ser Leu  
103 65 70 75 80  
105 Gly Gly Leu Lys Arg Arg Met Asp Leu Leu Glu Glu Ser Asn Gln Gln  
106 85 90 95  
108 Leu Leu Ala Thr Leu Asn Arg Leu Arg Thr Gly Leu Ala Ala Tyr Val  
109 100 105 110  
111 Gln Ala Asn Leu Val Gly Gly Gln Val Asn Pro Phe Val  
112 115 120 125  
114 <210> SEQ ID NO: 4  
115 <211> LENGTH: 140  
116 <212> TYPE: PRT  
117 <213> ORGANISM: Adenovirus  
119 <400> SEQUENCE: 4  
120 Met Ser Ala Asn Ser Phe Asp Gly Ser Ile Val Ser Ser Tyr Leu Thr  
121 1 5 10 15  
123 Thr Arg Met Pro Pro Trp Ala Gly Val Arg Gln Asn Val Met Gly Ser  
124 20 25 30  
126 Ser Ile Asp Gly Arg Pro Val Leu Pro Ala Asn Ser Thr Thr Leu Thr  
127 35 40 45  
129 Tyr Glu Thr Val Ser Gly Thr Pro Leu Glu Thr Ala Ala Ser Ala Ala  
130 50 55 60  
132 Ala Ser Ala Ala Ala Ala Thr Ala Arg Gly Ile Val Thr Asp Phe Ala  
133 65 70 75 80  
135 Phe Leu Ser Pro Leu Ala Ser Ser Ala Ala Ser Arg Ser Ser Ala Arg  
136 85 90 95  
138 Asp Asp Lys Leu Thr Ala Leu Leu Ala Gln Leu Asp Ser Leu Thr Arg  
139 100 105 110  
141 Glu Leu Asn Val Val Ser Gln Gln Leu Leu Asp Leu Arg Gln Gln Val

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142 115 120 125  
144 Ser Ala Leu Lys Ala Ser Ser Pro Pro Asn Ala Val  
145 130 135 140  
147 <210> SEQ ID NO: 5  
148 <211> LENGTH: 140  
149 <212> TYPE: PRT  
150 <213> ORGANISM: Adenovirus  
152 <400> SEQUENCE: 5  
153 Met Ser Thr Asn Ser Phe Asp Gly Ser Ile Val Ser Ser Tyr Leu Thr  
154 1 5 10 15  
156 Thr Arg Met Pro Pro Trp Ala Gly Val Arg Gln Asn Val Met Gly Ser  
157 20 25 30  
159 Ser Ile Asp Gly Arg Pro Val Leu Pro Ala Asn Ser Thr Thr Leu Thr  
160 35 40 45  
162 Tyr Glu Thr Val Ser Gly Thr Pro Leu Glu Thr Ala Ala Ser Ala Ala  
163 50 55 60  
165 Ala Ser Ala Ala Ala Ala Thr Ala Arg Gly Ile Val Thr Asp Phe Ala  
166 65 70 75 80  
168 Phe Leu Ser Pro Leu Ala Ser Ser Ala Ala Ser Arg Ser Ser Ala Arg  
169 85 90 95  
171 Asp Asp Lys Leu Thr Ala Leu Ala Gln Leu Asp Ser Leu Thr Arg  
172 100 105 110  
174 Glu Leu Asn Val Val Ser Gln Gln Leu Leu Asp Leu Arg Gln Gln Val  
175 115 120 125  
177 Ser Ala Leu Lys Ala Ser Ser Pro Pro Asn Ala Val  
178 130 135 140  
180 <210> SEQ ID NO: 6  
181 <211> LENGTH: 132  
182 <212> TYPE: PRT  
183 <213> ORGANISM: Adenovirus  
185 <400> SEQUENCE: 6  
186 Met Ser Gly Phe Thr Glu Gly Asn Ala Val Ser Phe Glu Gly Gly Val  
187 1 5 10 15  
189 Phe Ser Pro Tyr Leu Thr Thr Arg Leu Pro Ser Trp Ala Gly Val Arg  
190 20 25 30  
192 Gln Asn Val Val Gly Ser Asn Val Asp Gly Arg Pro Val Ala Pro Ala  
193 35 40 45  
195 Asn Ser Thr Thr Leu Thr Tyr Ala Thr Ile Gly Ser Ser Val Asp Thr  
196 50 55 60  
198 Ala Ala Ala Ala Ala Ser Ala Ala Ser Thr Ala Arg Gly Met  
199 65 70 75 80  
201 Ala Ala Asp Phe Gly Leu Tyr Asn Gln Leu Ala Ala Ser Arg Leu Arg  
202 85 90 95  
204 Glu Glu Asp Ala Leu Ser Val Val Leu Thr Arg Leu Glu Glu Leu Ser  
205 100 105 110  
207 Gln Gln Leu Gln Asp Met Ser Ala Lys Met Ala Leu Leu Asn Pro Pro  
208 115 120 125  
210 Ala Asn Thr Ser  
211 130

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Input Set : A:\208859.txt  
Output Set: C:\CRF3\06072001\I780224A.raw

213 <210> SEQ ID NO: 7  
214 <211> LENGTH: 133  
215 <212> TYPE: PRT  
216 <213> ORGANISM: Adenovirus  
218 <400> SEQUENCE: 7  
219 Met Ser Gly Ser Met Glu Gly Asn Ala Val Ser Phe Lys Gly Gly Val  
220 1 5 10 15  
222 Phe Ser Pro Tyr Leu Thr Thr Arg Leu Pro Ala Trp Ala Gly Val Arg  
223 20 25 30  
225 Gln Asn Val Met Gly Ser Asn Val Asp Gly Arg Pro Val Ala Pro Ala  
226 35 40 45  
228 Asn Ser Ala Thr Leu Thr Tyr Ala Thr Val Gly Ser Ser Val Asp Thr  
229 50 55 60  
231 Ala Ala Ala Ala Ala Ser Ala Ala Ala Ser Thr Ala Arg Gly Met  
232 65 70 75 80  
234 Ala Ala Asp Phe Gly Leu Tyr Asn Gln Leu Ala Ala Ser Arg Ser Leu  
235 85 90 95  
237 Arg Glu Glu Asp Ala Leu Ser Val Val Leu Thr Arg Met Glu Glu Leu  
238 100 105 110  
240 Ser Gln Gln Leu Gln Asp Leu Phe Ala Lys Val Ala Leu Leu Asn Pro  
241 115 120 125  
243 Pro Ala Asn Ala Ser  
244 130  
246 <210> SEQ ID NO: 8  
247 <211> LENGTH: 130  
248 <212> TYPE: PRT  
249 <213> ORGANISM: Adenovirus  
251 <220> FEATURE:  
252 <221> NAME/KEY: misc\_feature  
253 <222> LOCATION: (2)..(5)  
254 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
256 <220> FEATURE:  
257 <221> NAME/KEY: misc\_feature  
258 <222> LOCATION: (7)..(7)  
259 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
261 <220> FEATURE:  
262 <221> NAME/KEY: misc\_feature  
263 <222> LOCATION: (9)..(9)  
264 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
266 <220> FEATURE:  
267 <221> NAME/KEY: misc\_feature  
268 <222> LOCATION: (11)..(11)  
269 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
271 <220> FEATURE:  
272 <221> NAME/KEY: misc\_feature  
273 <222> LOCATION: (21)..(21)  
274 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
276 <220> FEATURE:  
277 <221> NAME/KEY: misc\_feature

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Input Set : A:\208859.txt  
Output Set: C:\CRF3\06072001\I780224A.raw

278 <222> LOCATION: (30)..(30)  
279 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
281 <220> FEATURE:  
282 <221> NAME/KEY: misc\_feature  
283 <222> LOCATION: (34)..(34)  
284 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
286 <220> FEATURE:  
287 <221> NAME/KEY: misc\_feature  
288 <222> LOCATION: (45)..(45)  
289 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
291 <220> FEATURE:  
292 <221> NAME/KEY: misc\_feature  
293 <222> LOCATION: (54)..(57)  
294 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
296 <220> FEATURE:  
297 <221> NAME/KEY: misc\_feature  
298 <222> LOCATION: (69)..(69)  
299 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
301 <220> FEATURE:  
302 <221> NAME/KEY: misc\_feature  
303 <222> LOCATION: (74)..(76)  
304 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
306 <220> FEATURE:  
307 <221> NAME/KEY: misc\_feature  
308 <222> LOCATION: (79)..(83)  
309 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
311 <220> FEATURE:  
312 <221> NAME/KEY: misc\_feature  
313 <222> LOCATION: (86)..(86)  
314 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
316 <220> FEATURE:  
317 <221> NAME/KEY: misc\_feature  
318 <222> LOCATION: (88)..(90)  
319 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
321 <220> FEATURE:  
322 <221> NAME/KEY: misc\_feature  
323 <222> LOCATION: (92)..(95)  
324 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
326 <220> FEATURE:  
327 <221> NAME/KEY: misc\_feature  
328 <222> LOCATION: (98)..(98)  
329 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
331 <220> FEATURE:  
332 <221> NAME/KEY: misc\_feature  
333 <222> LOCATION: (100)..(101)  
334 <223> OTHER INFORMATION: "Xaa" may be any amino acid  
336 <220> FEATURE:  
337 <221> NAME/KEY: misc\_feature  
338 <222> LOCATION: (105)..(105)

**VERIFICATION SUMMARY**

PATENT APPLICATION: **US/09/780,224A**

DATE: 06/07/2001

TIME: 13:54:11

Input Set : **A:\208859.txt**  
Output Set: **C:\CRF3\06072001\I780224A.raw**

L:377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:383 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:389 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:392 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:398 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:401 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8